



MEETING ABSTRACT

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# Disruption of biological rhythms as a core problem and therapeutic target in mood disorders: the emerging concept of "Rhythm-regulators"

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## Background

Biological rhythms was always considered to be disrupted in depression with the predominant theory being that of hyperarousal. However, recent data suggest that it might be more appropriate to suggest that depressed patients are incapable of achieving and maintaining that particular level of internal homeostasis which permits the organism to function smoothly, to lower enough the level of arousal during sleep, so that quality of sleep is good, and to increase this level enough during the day so as the person can function properly. Therefore the transition from one state to another is somewhat problematic, delayed, incomplete and de-synchronized. Thus agents with a 'rhythm stabilizing' effect could be beneficial in the treatment of mood disorders. Such an agent should have a beneficial effect on restoring and stabilizing the rhythm of a physiological function and not pushing it towards a specific pole, or inducing the opposite pole; it should also allow response to both internal and environmental stimuli and zeitgebers and restore synchronization of the various body rhythms and not inducing or worsening dysynchronization. Agomelatine could represent the first of a new class that is

'rhythm stabilizing antidepressant' but further research is necessary to support this.

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